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**United States Patent** [19]

Sagol et al.

[11] **Patent Number:** **5,165,170**[45] **Date of Patent:** **Nov. 24, 1992**[54] **RAZOR HAVING INTEGRAL HAIR  
DETECTION MEANS**[75] Inventors: **Sami Sagol**, Ramat Hasharon;  
**Benjamin Keren**; **Shai Levi**, both of  
Misgav, all of Israel[73] Assignee: **Keter Plastic Ltd.**, Jaffa, Israel[21] Appl. No.: **788,580**[22] Filed: **Nov. 6, 1991**[30] **Foreign Application Priority Data**

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H03F 21/00[52] U.S. Cl. .... **30/34.05**; **30/32**;  
381/120[58] Field of Search ..... **30/32**, **34.05**, **41.8**;  
381/56, 120, 122[56] **References Cited****U.S. PATENT DOCUMENTS**3,736,243 5/1973 Duggan ..... 30/32  
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4,773,158 9/1988 Kertzman ..... 30/32*Primary Examiner*—Douglas D. Watts*Assistant Examiner*—Paul Heyrana*Attorney, Agent, or Firm*—Helfgott & Karas[57] **ABSTRACT**

A razor having an integral hair detection means, the razor comprising a razor assembly mounted on a handle for brushing against a surface of a person's face and vibrating in response to contact with hairs thereon and a pickup coupled to the handle and responsive to vibrations produced therein for generating a corresponding signal. Electronic or acoustic audio frequency amplifying means are provided within the handle for amplifying the signal from the pickup as an audio frequency output. In use, the person shaving hears the amplified vibrations either directly via a loudspeaker or via an earpiece, so as to obtain feedback relating to the surface quality of the shave.

**10 Claims, 1 Drawing Sheet**